

## **ABSTRACT**

A spring loaded, high frequency, controlled impedance, coaxial probe assembly located within an insulated or conductive housing. A high frequency coaxial probe assembly consisting of a central contact which is fixed or axially floating within a controlled impedance connector body or assembly. A flexible, elastically de-formable, fixed or field replaceable and detachable, ground contact, snapped on and retained in place upon the controlled impedance connector body or assembly creating a fixed or axially floating reference plane or dimension from which the head of the probe contact will protrude through the controlled impedance connector body. The individual, high frequency, controlled impedance, coaxial probe assemblies are spring loaded to provide continuous axial signal contact, when deployed to a planar device such as a DUT (Device Under Test) board. The flexible, elastically de-formable, fixed or field replaceable and detachable, ground contact(s) provide a resilient and continuous wiping action. This wiping action removes oxides or material from the surface of the conductive elements of the planar device ground plane. This ensures contact with the conductive elements of the ground plane of the planar device, while reducing the inductance, by minimizing the total ground loop length between the outgoing and returning current paths.